



	IN THE UNITED STATES PATENT AND I RADEMARK OFFICE
In re patent ap	pplication of
Applicants: Serial No.: Filed: For: Art Unit:	Eric J. Horvitz, et al. 10/686,198 October 15, 2003 Methods and Apparatus for Predicting and Selectively Collecting Preferences Based on Personality Diagnosis 3714
Examiner:	Chanda L. Harris
	INFORMATION DISCLOSURE STATEMENT
Commissioner Alexandria, Vir	for Patents rginia 22313-1450
Sir:	
patents, publica except for: (a) upon which this	t to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the attornal of the information listed on the attached PTO-1449. A copy of each listed document is enclosed pending applications or (b) those previously cited or submitted to the Office in the following application(s) application relies for an earlier filing date under 35 U.S.C. 120; or (c) U.S. Patent(s) and published since the subject application was filed after June 30, 2003.
Serial No.: Filing Date	<u>09/629,217</u> <u>7/31/2000</u>
Applicant(s) be	document, publication or other information for which a date is not given on the attached PTO-1449, dieve(s) the same may qualify as "prior" art to this application and should be treated accordingly, although serve(s) the right to contest the prior art status of any document, publication or information, should issue arise.
	ng each listed document that is not in the English language, an English-language translation accompanies this dicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the ment(s):
(a)(Copy of each English language version of a search report indicating the degree of relevance found by the foreign office of each document being submitted from the search report.
(b)	Attachment entitled "Concise Explanation of Relevance of Non-English Language Documents".
3. Pursuan	t to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):
(a)	Within 3 months of the filing date or date of entry into the National Stage.
(b)	Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 50-1063 for consideration of this Statement.

06/03/2004 SSESHE1 00000124 501063 10686198

01 FC:1806

180.00 DA

- 1 -

	(c) <u>X</u>	After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance.
	(1)	The required certification is given below, or
	(2)	Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement, or
	(3) <u>X</u>	Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 50-1063 (Ref. No. MSFTP293USA).
	(d)Af	ter the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification is indicated below.
	(1)	Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(i)(1), or
	(2)	Charge the fee set forth in 37 C.F.R. 1.17(i)(1) to Deposit Account No. 50-1063.
4.	Certificati	on (if applicable)
	(a)	The undersigned hereby certifies that each item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement.
	(b)	The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the undersigned's knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than 3 months prior to the filing of this Statement.
5.	The Comr No. 50-10	nissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account 63.

Respectfully Submitted,

Jeffrey R. Sadlowski

Reg. No. 47,914

Amin & Turocy, LLP 24TH Floor, National City Center 1900 East 9th Street Cleveland, Ohio 44114 (216) 696-8730

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8

I hereby certify that this correspondence (along with any paper referenced as being attached or enclosed) is being deposited on the below date with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, Alexandria, Virginia 22313-1450.

Date: 5-26-2004

Jeffrey R. Sadlowski

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet 1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of |5

Complete if Known			
Application Number	10/686,198		
Filing Date	10/15/2003		
First Named Inventor	Eric J. Horvitz		
Art Unit	3714		
Examiner Name	Harris, Chanda L.		
Attorney Docket Number	MS158283.2/MSFTP293USA		

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	 	US- 6,487,539	11 26 2002	Agganual et al	· igailee / tppea.
	-		11-26-2002	Aggarwal et al.	
	<u> </u>	^{US-} 2002/0107853	08-08-2002	Hofmann et al.	
		^{US-} 6,405,159	06-11-2002	Bushey et al.	
		^{US-} 2002/0065802 A1	05-30-2002	Uchiyama	
		^{US-} 2002/0052873	05-02-2002	Delgado et al.	
		^{US-} 2002/0045154	04-18-2002	Wood et al.	
		^{US-} 6,353,813	03-05-2002	Breese et al.	
		^{US-} 6,345,264	02-05-2002	Breese et al.	
		^{US-} 2001/0013009	08-09-2001	Greening, et al.	
		^{US-} 6,272,467	08-07-2001	Durand et al.	
		^{US-} 6,236,978	05-22-2001	Tuzhilin	
		^{US-} 6,199,076	03-06-2001	Logan et al.	
		^{US-} 6,185,534	02-06-2001	Breese et al.	
		^{US-} 6,144,964	11-02-2000	Breese et al.	
		^{US-} 6,018,738	01-25-2000	Breese et al.	
•		^{US-} 5,918,014	06-29-1999	Robinson	
		^{US-} 5,884,282	03-16-1999	Robinson	
		^{US-} 5,842,199	11-24-1998	Miller et al.	
		^{US-} 5,704,017	12-30-1997	Heckerman et al.	

		FOREIG	N PATENT DOCL	JMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ^{3 "Number 4 "} Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T⁵
		JP 2001209723 A	08-2001	Masato et al.		
	ļ					
			ļ			Щ
			1	<u> </u>	1	$ldsymbol{ld}}}}}}$

Examiner	 Date	
Signature	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO	Complete if Known		
0135111511611111111111111111111111111111	Application Number	10/686,198	
INFORMATION DISCLOSURE	Filing Date	10/15/2003	
· · · · · · · · · · · · · · · · · · ·	First Named Inventor	Eric J. Horvitz	
STATEMENT BY APPLICANT	Art Unit	3714	
(Use as many sheets as necessary)	Examiner Name	Harris, Chanda L.	
Sheet 2 of 5	Attorney Docket Number	MS158283.2/MSFTP293USA	

Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
nitials*	No.1	Number-Kind Code ^{2 (if known)}	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
		^{US-} 5,659,731	08-19-1997	Gustafson	
	ļ	US-	00-13-1337	Gustaison	
		US-			
		US-			
	· · · · · · · · · · · · · · · · · · ·	US-			
		US-		-	
	-	US-			
		US-	1		
		US-			

	FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ^{3 -} Number ^{4 -} Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T ⁶
						<u> </u>
						┝
						-
				<u> </u>		

	AND THE RESERVE OF THE PERSON		
Examiner		Date	
Signature		Considered	
	i i		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute for form 1449/PTO **Application Number** 10/686,198 **INFORMATION DISCLOSURE Filing Date** 10/15/2003 STATEMENT BY APPLICANT **First Named Inventor** Eric J. Horvitz Art Unit 3714 (Use as many sheets as necessary) **Examiner Name** Harris, Chanda L. Attorney Docket Number Sheet 3 of 5 MS158283.2/MSFTP293USA

Examiner	Cite	NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	
Initials*	No.1	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		JOAQUIN DELGADO, et al., Memory-Based Weighted-Majority Prediction, Nagoya Institute of Technology, 1999, 5 pages, Nagoya, Japan.	
		WILLIAM W. COHEN, et al., Learning to Order Things, Journal of Artificial Intelligence Research, 1999, pp. 243-270, Vol. 10.	
		J. BEN SCHAFER, et al., Recommender Systems in E-Commerce, E-COMMERCE 99, 1999, pp. 158-166, Denver, Colorado, USA.	
		LYLE H. UNGAR, et al., A Formal Statistical Approach to Collaborative Filtering, CONALD'98, 1998, 6 pages.	
		LYLE H. UNGAR, et al., Clustering Methods for Collaborative Filtering, AAAI Workshop on Recommendation Systems, 1998, 16 pages.	
		CHUMKI BASU, et al., Recommendation as Classification: Using Social and Content-Based Information in Recommendation, Proceedings AAAI-98, 1998, 5 pages.	
		JOHN S. BREESE, et al., Empirical Analysis of Predictive Algorithms for Collaborative Filtering, Microsoft Research, Proceedings of the Fourteenth Conference on Uncertainty in Artificial Intelligence, 1998, 10 pages, Madison, Wisconsin, USA.	
		DANIEL BILLSUS, et al., Learning Collaborative Information Filters, Proceedings of the Fifteenth International Conference on Machine Learning, 1998, pp. 46-54.	
		ATSUYOSHI NAKAMURA, et al., Collaborative Filtering using Weighted Majority Prediction Algorithms, Machine Learning: Proceedings of the Fifteenth International Conference, 1998, pp. 395-403.	
		YOAV FREUND, et al., An Efficient Boosting Algorithm for Combining Preferences, Proceedings of ICML-98, 1998, pp. 170-178.	

Signature Consi	lered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMR control number.

Substitute for form 1449/PTO			. or 1999, 110 persons an	Complete if Known			
				Application Number	10/686,198		
INFO	ORMATIO	N DIS	CLOSURE	Filing Date	10/15/2003		
STA	STATEMENT BY APPLICANT			First Named Inventor	Eric J. Horvitz		
(Use as many sheets as necessary)				Art Unit	3714		
(Social many sheets as necessary)			ecessary)	Examiner Name	Harris, Chanda L.		
Sheet	4	of	5	Attorney Docket Number	MS158283.2/MSFTP293USA	\supset	

Examiner	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	
Initials*	No. ¹	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		PAUL RESNICK, et al., Recommender Systems, Communications of the ACM, 1997, pp.56-58, Vol. 40- No. 3.	
		JOSEPH A. KONSTAN, et al., GroupLens: Applying Collaborative Filtering to Usenet News, Communications of the ACM, 1997, pp. 77-87, Vol. 40-No. 3.	
		HENRY KAUTZ, et al., The Hidden Web, American Association for Artificial Intelligence, 1997, pp. 27-36.	
		THOMAS HOFMANN, et al., Active Data Clustering, NIPS'97, 1997, 7 pages.	
		ALEXANDER CHISLENKO, Automated Collaborative Filtering and Semantic Transports, 1997, 17 pages.	
		UPENDRA SHARDANAND, et al., Social Information Filtering: Algorithms for Automating "Word of Mouth", CHI'95, 1995, pp. 210-217, Denver, Colorado, USA.	
		PAUL RESNICK, et al., GroupLens: An Open Architecture for Collaborative Filtering of Netnews, CSCW'94, 1994, pp. 175-186, Chapel Hill, North Carolina, USA.	
		HARRIS DRUCKER, et al., Improving Performance in Neural Networks Using a Boosting Algorithm, Advances in Neural Information Processing, 1993, pp. 42-49.	
		DAVID GOLDBERG, et al., Using Collaborative Filtering to Weave an Information Tapestry, Communications of the ACM, 1992, pp. 61-68, Vol. 35-No. 12.	
		ERIC J. HORVITZ, et al., Decision Theory in Expert Systems and Artifical Intelligence, Journal of Approximate Reasoning, 1988, 51 pages.	-

ପ

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449/PTO			ct of 1995, no persons a	Complete if Known			
				Application Number	10/686,198		
INFO	ORMATIO	N DIS	CLOSURE	Filing Date	10/15/2003		
STA	STATEMENT BY APPLICANT			First Named Inventor	Eric J. Horvitz		
	(lice on many of	haada aa m		Art Unit	3714		
	(Use as many sheets as necessary)			Examiner Name	Harris, Chanda L.		
Sheet	5	of	5	Attorney Docket Number	MS158283.2/MSFTP293USA		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		JUDEA PEARL, Probabilistic Reasoning in Intelligent Systems: Networks of Plausible Inference, Morgan Kaufmann Publishers, Inc., 1988, pp. 313-318, San Francisco, California, USA.	
		HOWARD RAIFFA, DECISION ANALYSIS: Introductory Lectures on Choices Under Uncertainty, Addison-Wesley Publishing Company, 1970, pp. 39-43, Reading, Massachusetts, USA.	
Evaminer	1	Dete	

Examiner	-	Date	
Signature		Considered	-

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.